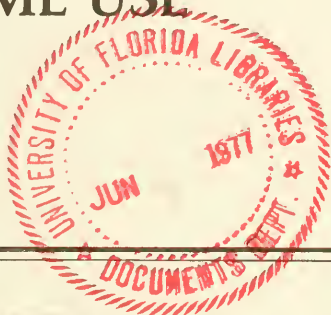
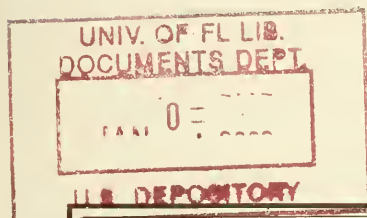


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GROWING APRICOTS FOR HOME USE



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GROWING APRICOTS

FOR HOME USE

You can grow apricot trees in your yard or garden. They are adapted to a wide range of soil types and are attractive, symmetrical lawn trees that require only routine care. They produce fruit, however, only on sites that are relatively free of frosts during early spring. The fruit can be eaten fresh, preserved, or dried.

ADAPTATION

Apricots produce fruit on favorable sites in most parts of the country, except in very cold and very warm areas. Blooms appear early and are easily damaged by spring frost. The blossoms and small fruits are as cold tender as peaches and other stone fruits.

The frost hazard is primarily responsible for the concentration of commercial production in California (97 percent), Washington, and Utah. A few are produced in Colorado, Idaho, Michigan, and Oregon.

High winter temperatures also limit apricot production in the very warm sections of the country. Apricot buds must be winter-chilled to break their rest period and start rapid growth. If minimum temperatures are high during winter, many fruit buds drop before flowering.

PLANTING SITES

Apricot trees are adapted to a variety of soils and climatic condi-

tions, but the growing site must be relatively frost-free for the trees to produce fruit. The most frost-free sites are near large lakes, on the tops or sides of hills, or near the base of high hills or mountains. In valleys, there is little air movement and the coldest air settles in the lowest places where damaging temperatures occur more frequently and for longer periods than on sites with good air drainage.

Apricot trees grow best in deep, fertile, well-drained soil but they grow well in light, sandy soil when adequately fertilized and watered. Avoid heavy, poorly drained soil. Also avoid sites where tomatoes, cotton, or brambles have grown; these crops harbor the verticillium wilt fungus that causes "black heart" of apricot.

Adequate soil moisture until harvest is necessary to produce large fruit. Trees need water after harvest for forming the next year's fruit buds. Supplemental irrigation may be required during long dry periods.

Temperatures of 102° F. or more just prior to fruit maturity cause pit burn. Pit burn is darkening of the flesh around the pit. High humidity and heavy rainfall increase brown rot infection.

VARIETIES

Fruit characteristics of the common varieties of apricots follow:

Royal and Blenheim.—These are

very similar and represent nearly two-thirds of the acreage in the United States. They have excellent flavor, small- to medium-size, and medium firmness; they are subject to pit burn when nearing maturity.

Tilton.—Tilton represents nearly one-fourth of the acreage in the United States. It is larger, lighter colored, and firmer fleshed than Royal but the flavor is not as desirable. It is less subject to pit burn than Royal, which makes it better adapted to warm areas. It bears heavy crops but has a tendency to produce fruit only every other year.

Other varieties that may be available locally include Wenatchee (Moorpark). Modesto, Goldcot, Manchu, Reliable, and Superb. Varieties that are self-unfruitful and require another variety for pollination are Earlirlil, Moongold, Sungold, Riland, and Perfection.

PLANTING

A 1-year-old tree 4 to 6 feet tall and one-half to three-fourths of an inch in diameter at the base is the ideal size. This may be a June-budded or August-budded tree, but in either case, it will have produced only one season's growth of the bud. Larger, or 2-year-old, trees may be used but they generally are more expensive. Although smaller trees often are satisfactory, they require extra care during the first year. Nursery trees usually are straight whips; however, they may be branched.

When you receive trees from the nursery and cannot plant them immediately, bury the roots temporarily in well-drained, moist soil to

keep them from drying. Pack soil around them to the same depth they were in at the nursery.

Another way to keep the roots moist temporarily is to place moist packing material such as sawdust, old straw, or peat moss around them. Keep the trees in a cool, shaded place and keep the packing material moist.

Plant apricot trees 24 to 30 feet from houses and other trees, if possible. At these distances, trees are more easily held to the desired height and shape by pruning.

In cold climates, plant trees while they are dormant in late winter or early spring. In moderate climates, you may plant them in late fall or winter so that roots can become established before top growth starts.

Thoroughly spade or plow the planting site to loosen the soil and remove weeds. Loose soil encourages root growth. The soil must not be too wet to cultivate at time of planting, but it should be moist. Prepare the planting hole large enough to hold the roots without bending them.

Cut off broken or diseased roots and shorten any unusually long ones. Plant the tree at the same depth it was at the nursery. Sift the soil in around the roots and pack it. Fill the hole level with the ground surface. Water the soil to settle it around the roots.

Newly planted trees need nitrogen fertilizer. Apply one-eighth to one-fourth pound of nitrogen fertilizer evenly over a 3-foot circle around the tree at planting. Repeat this two or three times in early sum-

mer if needed to maintain good growth. Do not fertilize after mid-summer. This will allow normal hardening of the tree before winter.

PRUNING

The purpose of pruning is to shape the tree, limit the crop, and maintain the vigor. Young trees just developing their fruit-bearing branches should be pruned lightly because pruning dwarfs them and delays bearing. Prune the top at planting time by cutting back the main stem 18 to 30 inches from the ground (fig. 1).

Cut off all lateral branches that are within 12 inches of the ground close to the trunk. Large lateral branches that are attached higher on the trunk, and are distributed around the tree at different heights,

should be cut back to 4 to 6 inches in length. You may use three or four of these later as scaffold branches that will control the shape of the tree. Remove all other laterals, but leave short stubs to produce new buds.

In the spring when new growth is 3 to 4 inches long, the three or four scaffold branches may be selected by their position on the trunk. Pinch back the tips of new shoots on all other growth. Remove only the tip of each shoot; removal of the entire shoot will cause a drastic setback in growth. Additional pinching back later will also help in directing tree growth into the scaffold branches.

After the first growing season, the three or four branches selected to form a uniformly shaped tree should be headed back 2 or 3 feet from the trunk to form the primary scaffolds (fig. 2). Make the cut just above an outside lateral branch on each scaffold branch.

Remove branches other than the scaffolds from the trunk of the tree. Leave the lateral branches on the scaffolds that do not cross each other. Lightly pruned trees will bear earlier and heavier than heavily pruned ones.

In the second dormant-season pruning, leave the short spur-type branches on the tree. Remove laterals forming on the scaffolds near the trunk. Select five to seven secondary scaffolds from laterals growing on the primary scaffolds. The secondary scaffolds should arise 4 to 5 feet from the ground. Normally these grow where the main scaffolds were headed the previous



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Figure 1.—Newly planted apricot tree headed back at about 28 inches (arrow). Union is at ground line.



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Figure 2.—One-year-old apricot tree with well-placed scaffold branches selected and headed back.

season. They should be well spaced around the tree because they will form the main framework (fig. 3).

Remove other secondary branches and keep the center of the tree open. Some heading back and balancing of scaffolds may be needed. The top-most scaffold should be the largest to prevent it from being crowded out by lower branches.

The dormant-season pruning is also a shaping and thinning process. Severe heading back is not necessary until the tree grows to the desired height.

After the growing tree has been trained and shaped the first 3 or 4 years, the mature tree is pruned to control height, maintain vigor, and renew the short branches or spurs.

Most apricot varieties bear principally on the spurs, which are short-lived. A common practice is to replace about one-third of the spurs

each year. You can encourage their formation by spacing branches for exposure to sunlight, cutting back vigorous growth to weaker laterals, and thinning out upper branches to prevent excessive shading (fig. 4). The tree should produce from 15 to 30 inches of new growth each year.

THINNING THE FRUIT

Apricot trees tend to produce more fruit than they should bear. Thinning the fruit reduces the load, produces larger fruit, encourages regular bearing, and promotes earlier maturity. Thin the fruit during the pit-hardening stage when growth of the fruit has temporarily slowed (6 to 8 weeks after bloom).

Remove smaller fruits first and break up clusters. The amount of thinning needed depends on the number of fruits set on the tree and the ultimate size of fruit desired.

FERTILIZING

Nitrogen is needed more than any other fertilizer by most apricot trees. Nitrogen deficiency causes yellow foliage, lower production, and smaller, firmer fruit that matures early. The proper amount of nitrogen to apply is best determined by trial or from previous experience. Usually one-fourth to 1 pound of ammonium nitrate per tree is adequate. You may apply nitrogen in fall or early spring.

Apricots need additional potash when the soil is low in potassium. Land scraped in leveling or leached by rain is most likely to be low in potassium. Two to 4 pounds of muriate or sulfate of potash per tree

applied in early spring is usually adequate.

CULTIVATING AND HARVESTING

Apricot trees are generally cultivated in late winter or early spring to kill grass and other weeds, which should not be permitted to compete with the trees during the period of most active growth. Later, you may allow grass or weeds to grow. A ground cover of grass, weeds, or mulch at harvest helps prevent pit burn by keeping temperatures lower, but it also encourages brown rot infection.

Allow fruit harvested for canning to become firm-ripe on the tree but not fully mature. Harvest fruit for drying when it is fully mature.

PEST CONTROL

Fungus and Bacterial Diseases

The most serious fungus and bacterial diseases that attack apricots are brown rot, shot-hole, bacterial canker, cytosporina, and crown gall.

Brown rot.—Brown rot attacks both blossoms and fruits. Infected blossoms wither and die. The fungus then moves into the twigs at the base of the blossoms and causes cankers. Masses of ash-gray powdery spores appear and these may cause new infection throughout the season and the following year.

To control blossom infection, remove infected twigs at pruning time before blossoms develop. Spray with benomyl, captan, or bordeaux mixture between the redbud stage and full bloom. Do not use a sulfur



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Figure 3.—Ten-year-old apricot tree with strong framework of three scaffold branches and strong secondary branching.

spray on apricots because it seriously injures them.

Brown rot can be controlled on ripening fruit by preharvest sprays of captan or benomyl. Destroy all mummies, or rotted fruits, on the tree or ground.

Shot-hole.—Shot-hole fungus causes defoliation of trees and malformation of fruit. In the spring, reddish spots appear on the leaves and fruits. Affected parts of the leaves fall out, causing holes. Infected buds die during the winter.

To control the disease, spray with ziram or captan at redbud stage, early bloom, and full bloom, and spray with bordeaux mixture, ziram, or ferbam just after leaf fall.

Bacterial canker.—Young apricot trees are highly susceptible to bacterial canker, which usually affects buds and spurs. However, the disease may produce large dead



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Figure 4.—Twelve-year-old orchard after pruning.

areas or cankers on large limbs and the trunk. Infected branches or the whole tree may die.

There is no satisfactory control for bacterial canker. A spray of 10-10-100 bordeaux mixture just as leaves begin to fall and again when most of the leaves are off may be of some benefit, but is not always effective.

Cytosporina.—*Cytosporina* is a fungus disease that occurs almost entirely at pruning wounds and causes dieback of small branches, large limbs, and even entire trees. The infection produces cankers, discolored wood, gum exudation as the disease advances, and weak growth.

Sanitation is the best control. Remove and burn all infected parts, cutting at least 6 inches below a canker. Seal large pruning wounds with grafting wax or an oil base

paint. Sterilize pruning tools with formalin after cutting through a canker.

Crown gall.—This bacterial disease infects large roots or crowns of apricot trees. It produces irregular gall enlargements and growths that may girdle the tree.

Crown gall bacteria are widely distributed in soils and enter trees through wounds. Care should be taken in planting trees and during cultivation to avoid injuring the trunks and large roots. You can control the infection by cleaning the soil away from the diseased area and painting the gall with meta-cresol.

Virus Diseases

Many virus diseases are capable of infecting apricot trees but few do serious damage. Ring pox and ring spot are the most common.

Ring pox.—Ring pox causes the leaves of apricot trees to develop irregular rings and angular spots, or yellowed areas. Fruits develop surface bumps and may drop. Infected trees should be destroyed.

Ring spot.—Ring spot symptoms are rare on most apricot varieties. Rings and yellowed patterns on leaves may develop in the initial acute stage of the disease but disappear later. The disease reduces growth. No control has been developed.

Insects

Many species of insects attack apricot trees. Some of the more common ones and the insecticides for their control follow :

<i>Pest</i>	<i>Insecticide</i>
Aphids	malathion
Borers	endosulfan
Japanese beetles	carbaryl or malathion
Mites	dicofol
Oriental fruit moth	carbaryl
Plum curculio	malathion or methoxychlor
Scales	malathion

Follow all directions and heed all precautions on the insecticide package labels. For further information on insect control, see your county agricultural agent or State extension service.

USE OF PESTICIDES

This publication is intended for nationwide distribution. Pesticides are registered by the Environmental Protection Agency (EPA) for countrywide use unless otherwise indicated on the label.

The use of pesticides is governed by the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. This act is administered by EPA. According to the provisions of the act, "It shall be unlawful for any person to use any registered pesticide in a manner inconsistent with its labeling." (Section 12(a)(2)(G))

EPA has interpreted this Section of the Act to require that the intended use of the pesticide must be on the label of the pesticide being used or covered by a Pesti-

cide Enforcement Policy Statement (PEPS) issued by EPA.

The optimum use of pesticides, both as to rate and frequency, may vary in different sections of the country. Users of this publication may also wish to consult their Cooperative Extension Service, State agricultural experiment stations, or county extension agents for information applicable to their localities.

The pesticides mentioned in this publication are available in several different formulations that contain varying amounts of active ingredient. Because of this difference, the rates given in this publication refer to the amount of active ingredient, unless otherwise indicated. Users are reminded to convert the rate in the publication to the strength of the pesticide actually being used. For example, 1 pound of active ingredient equals 2 pounds of a 50 percent formulation.

The user is cautioned to read and follow all directions and precautions given on the label of the pesticide formulation being used.

Federal and State regulations require registration numbers. Use only pesticides that carry one of these registration numbers.

USDA publications that contain suggestions for the use of pesticides are normally revised at 2-year intervals. If your copy is more than 2 years old, contact your Cooperative Extension Service to determine the latest pesticide recommendations.

The pesticides mentioned in this publication were federally registered for the use indicated as of the issue of this publication. The user is cautioned to determine the directions on the label or labeling prior to use of the pesticide.

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FOLLOW THE LABEL
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